

AMENDMENT TO THE CLAIMS

The following listing of claims replaces all prior versions and listings of claims in the application.

Claims 1-2 (Canceled)

3. (Currently Amended) ~~The isolated polypeptide of claim 1; An isolated polypeptide, comprising an intracellular estradiol binding protein (IEBP) as comprising the amino acid sequence~~ set forth in SEQ ID NO:1.

Claims 4-18 (Canceled)

19. (New) An isolated polypeptide, comprising an intracellular estradiol binding protein (IEBP) that has at least 90% identity to the amino acid sequence set forth in SEQ ID NO:1 wherein said isolated polypeptide is capable of binding to estradiol.
20. (New) The isolated polypeptide of claim 19, wherein the IEBP has at least 95% identity to the amino acid sequence set forth in SEQ ID NO:1.
21. (New) A composition comprising:
an isolated polypeptide, comprising an intracellular estradiol binding protein (IEBP) that has at least 90% identity to the amino acid sequence set forth in SEQ ID NO:1 wherein said isolated polypeptide is capable of binding to estradiol; and
a carrier.
22. (New) The composition of claim 21, wherein said isolated polypeptide is an IEBP polypeptide that has at least 95% identity to the amino acid sequence set forth in SEQ ID NO:1.

23. (New) The composition of claim 21, wherein said isolated polypeptide is set forth in SEQ ID NO:1.
24. (New) The composition of claim 21, wherein said carrier is selected from the group consisting of phosphate buffered saline (PBS) solution, water, emulsions, and wetting agents, and combinations thereof.